

**Memory Reallocation And Sharing In Electronic Systems**

**ABSTRACT**

5       Memory reallocation and sharing among components of an electronic system is provided. The electronic system includes a first memory area coupled for access by a first processor via a first bus, and a second memory area coupled for access by a second processor via a second bus. An example system includes a central processor as the first processor and a digital signal processor as the second processor. The electronic system  
10 further includes memory configurations that support shared access of the second memory area by the first processor. Using shared access, the first processor can directly access the second memory via the first bus or indirectly access the second memory via the second bus and the second processor. The memory sharing also includes partitioning the shared memory to simultaneously provide the first processor with direct and indirect  
15 access to the shared memory.